UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,418	11/11/2003	John Joseph Rabasco	06426 USA	6797

23543 7590 10/19/2006

AIR PRODUCTS AND CHEMICALS, INC.
PATENT DEPARTMENT
7201 HAMILTON BOULEVARD
ALLENTOWN, PA 181951501

EXAMINER	
SALVATORE, LYNDA	
ART UNIT	**PAPER NUMBER**
1771	

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/706,418	RABASCO ET AL.	
	Examiner	Art Unit	
	Lynda M. Salvatore	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's remarks and declaration filed 8/4/06 have been fully considered and entered. Applicant's remarks and evidence are found persuasive to overcome the obviousness rejections set forth in section 4 of the last Office Action. Specifically, the secondary reference of Kohlhammer et al., US 6,559,259 fails to teach the claimed ethylene-vinyl acetate polymer comprised of crystalline ethylene segments. As such, the rejection of claims 1-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Hoopengardner, US 4,990,399 in view of Kohlhammer et al., US 6,559,259 is hereby withdrawn. However, upon further consideration the following new ground of rejection is set forth herein below.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoopengardner, US 4,990,399 in view of Kohlhammer et al., US 6,559,259 and further in view of JP 07195637A.

The patent issued to Hoopengardner teaches a carpet cushion comprising a compressible foam layer coated with a layer of pressure sensitive adhesive (abstract, figure 1 and column 4, 14-37). Hoopenengardner does not teach a specific adhesive composition, however, the patent issued to Kohlhammer et al., teach a water soluble adhesive suitable for textiles, non-wovens and the production of compression moulding compositions and shaped articles (column 9, 58-65). Kohlhammer et al., disclose cross-linkable protective colloids and processes for the

polymerization of ethylenicially unsaturated monomers using such protective colloids. The stabilization of polymer dispersion with protective colloids and surfactant is known in the art (Column 1, lines 11-17). The aqueous polymer dispersions are prepared by the process of aqueous emulsion polymerization and can be carried out under increased pressure (Column 6, lines 22-30 and 48-50). With regard to the surfactant limitations, Kohlhammer et al., teach employing nonionic and anionic fatty alcohols (e.g., surfactant) (column 6, 55-60). Polymer dispersions of 50 to 95% by weight of vinyl acetate and 5 to 50% of ethylene and 50-75% by weight of vinyl acetate, 1 to 30% by weight of acrylic acid ester, and 5 to 40% by weight of ethylene are especially preferred (Column 7, lines 62-67 and Column 8, lines 18-21). Kohlhammer et al., teach that the polymer composition exhibits high mechanical strength and high resistance to water and solvents (column 2, 15-25).

Therefore, motivated by the desire to provide a carpet with an adhesive having high mechanical strength and high resistance to water and solvents, it would have been obvious to one having ordinary skill in the art at the time the invention was made to coat the carpet taught by Hoopengardner with the adhesive taught by Kohlhammer et al.

Kohlhammer et al., does not specifically teach the claimed crystalline ethylene segments, however, the published JP abstract discloses a resin composition comprising ethylene-vinyl acetate copolymer having crystalline ethylene. Said composition exhibits high heat sealing and gas barrier properties.

Therefore, motivated by the desire to provide a carpet with an adhesive having the combination of high mechanical strength, water/solvent resistance, high heat sealing and gas barrier properties, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to formulate the adhesive composition taught by Kohlhammer et al., used to coat the carpet of Hoopengardner with the ethylene-vinyl-acetate resin composition comprised crystalline ethylene as taught in the published JP abstract.

With regard to the crystalline melting point range limitations recited, Kohlhammer et al., and the published JP abstract do not specifically teach the claimed range, however, given that the chemical composition of the ethylene vinyl acetate copolymer and the process of making such a copolymer as taught by Kohlhammer et al., and the published JP abstract are identical to the claimed invention, it is reasonable to presume that the claimed melting point range is inherent to the ethylene-vinyl-acetate composition provided by the combination of Kohlhammer et al., and the published JP abstract. Applicant is invited to evidence otherwise.

Similarly, with regard to the claimed tensile storage modulus and heat of fusion properties, the Examiner submits that the adhesive provided by the combination of Kohlhammer et al., and the published JP abstract would be expected to have the claimed properties. Support for said presumption is found in the use of ethylene-vinyl acetate emulsion comprised of crystalline ethylene and in the claimed amounts of each constituent. Applicant is invited to evidence otherwise.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 16, 2006
ls